

AMSAT News Service Weekly Bulletins

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AMSAT NEWS SERVICE

ANS-109

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on <http://www.amsat.org> publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

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ANS-109 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 109.01

From AMSAT HQ Kensington, MD.

April 19, 2015

To All RADIO AMATEURS

BID: \$ANS-109.01

Fox-1C and Fox-1D Include L-Band Uplink; Fox-1E Linear Transponder Announced

AMSAT Vice President - Engineering Jerry Buxton, N0JY, announced plans to incorporate an L band receiver in Fox-1C and Fox-1D. The addition will allow ground commanded selection of the U/v (normal Fox-1 bands) or the new L/v 1.2 GHz (23 cm) mode. Both bands will operate as FM single channel.

Rather than adding a complete new receiver, the L band "Project Downshifter" will convert the received L band signal down to the Fox-1 uplink frequency and feed it to the regular UHF receiver on the Fox-1 satellite. The design will not require an additional antenna on the satellite because the existing UHF antenna will work for L band receive as well.

In concert with the development of the satellite segment, a new group of volunteers is working on a companion uplink station to convert UHF to the L band uplink frequencies:

- + Bruce Herrick, WW1M
- + Dan Hubert, VE9DAN
- + Elizabeth Schenk, KC1AXX

+ Dave Smith, W6TE
+ Alfred Watts, AF5VH

The team is planning to have an affordable L band uplink ground station available to amateurs by the time Fox-1C is on orbit.

In further news, Jerry announced the plan to construct a Fox-1E "Evolution" variation of the Fox-1 series which will carry a Mode J linear transponder. The transponder is planned to be 30 kHz wide and will also include a 1200 bps BPSK telemetry beacon. The purpose of the project is to test a design for a linear transponder that could be made available to CubeSat builders as a secondary, or even primary radio payload thus bringing more opportunities for amateur radio in space as well as offering AMSAT's proven communications skills as a telemetry option.

AMSAT has been approached for a launch opportunity for Fox-1E in 2016, but launch details can not be shared at this time.

Jerry concluded, "It is important that we find additional resources to help the Fox-1 Team with these new endeavors. We are looking for volunteers who have solid RF building and testing experience to work on both the downshifter and the transponder prototyping and construction." If you would like to help and be a part of the success of Fox-1C/D and Fox-1E, please contact Jerry through the AMSAT Engineering volunteer form page on-line at: http://ww2.amsat.org/?page_id=1121.

[ANS thanks AMSAT Vice President - Engineering Jerry Buxton, N0JY, for the above information]

Immediate Volunteer Opening at AMSAT: Cubesat Thermal Engineering

AMSAT Vice President - Engineering Jerry Buxton, N0JY, says he has an immediate need for a volunteer who is experienced in thermal engineering. Opportunities include upcoming AMSAT CubeSats up to 6U in LEO and HE0, and larger spacecraft up to 150 kg.

Jerry says Sinda, Thermica, and Patran software experience would be helpful.

If you would like to help and be a part of the success of Fox-1C/D and Fox-1E, please contact Jerry through the AMSAT Engineering volunteer form page on-line at: http://ww2.amsat.org/?page_id=1121.

[ANS thanks AMSAT Vice President - Engineering Jerry Buxton, N0JY, for the above information]

AMSAT at the Dayton Hamvention -- Second call for volunteers

The Dayton Hamvention is less than five weeks away!

It is time to be creating your shopping list and making your travel plans. If you can stay for more than a day and you want to stay at the AMSAT hotel, contact Martha ASAP.

Last year, we had 52 people assist with the AMSAT booth at Dayton. We've had a good response so far to our call for volunteers, but we could really use another 10-15 people.

The interaction with AMSAT members, satellite operators, designers, and builders makes the whole experience a lot of fun. Meet or renew acquaintances, exchange operating tips, and find out what antennas, software and equipment other AMSAT members use. We currently expect all of the AMSAT senior officers and 5 of the 7 board members to be there too.

The 2015 Hamvention is May 15-17. Would you consider helping AMSAT at Dayton this year?

If you're an experienced operator, great! We can use you and your experience.

If you've never operated a satellite before, but want to learn more, that's OK. We can use your help too.

Whether you're available for only a couple of hours or if you can spend the entire weekend with us, your help would be greatly appreciated.

Please send an e-mail to Steve, [n9ip\(a\)amsat.org](mailto:n9ip@amsat.org) if you can help. Thank you!

[ANS thanks Steve, N9IP, Dayton Team Leader, for the above information]

"GB4MBC" - Special Event Station - Cancelled

With respect to the planned activation of the Special Event Station - "GB4MBC" on HF and satellite during 24th -27th April 2015 -Location: "Flatholm Island" EU124. Due to circumstances beyond our control, "Barry Amateur Radio Society" South Wales, regrets that the visit and activation has been cancelled.

An attempt for contacts from our mainland station with its Marconi special call GB0MDI -Locator IO81JJ

[ANS thanks Ken, GW1FKY, for the above information]

Clive Wallis – G3CWW – SK

From Jim Heck, G3WGM, Hon Sec AMSAT-UK

It is with great sadness that I have to inform you that I have just learnt of the passing of our dear friend Clive Wallis, G3CWW on 27th March 2015.

Clive has been a very staunch supporter of AMSAT from the very early days. Many will recall his intense interest and loyalty in following UOSAT-2/UO-11. He maintained a very comprehensive web site with details of the spacecraft's activities. He wrote many articles for Oscar News about his activities. He attended many AMSAT-UK Colloquia.

For 17 years between 1996 and 2013 Clive produced monthly reports on

OSCAR-11
(UoSAT-2).

The report archive is at <http://www.g3cwv.co.uk/newsarch.htm>

Clive's OSCAR-11 page <http://www.g3cwv.co.uk/oscar11.htm>

In 1993 Clive Wallis G3CWV took over distribution of satellite related BBC software

<http://amsat-uk.org/2011/12/11/bbc-micro-and-amsat-uk-software-library/>

He was awarded the Louis Varney cup for 2015 by the RSGB, and although he knew of the award before his passing, the formal presentation is not until 25 April.

His funeral is to be held on Tue 22 April 2015 at 3.00pm at Christchurch, Bedford Road, Hitchin, Herts, UK. I am sure that his family would appreciate the presence of any AMSAT members who are able to be there.

We send our condolences to his widow, Janet.

RIP, Clive.

73s
Jim Heck G3WGM
Hon Sec AMSAT-UK

[ANS thanks Jim Heck, G3WGM, Hon Sec AMSAT-UK for the above information]

Cayman Island on Satellites May 20-25

ZF2, CAYMAN ISLANDS. Operators Pete/N8PR and Bill/NZ5N will be active as ZF2EM from the Cayman Islands between May 20-25th. Main activity will be focused on 2 meter EME, but with some HF SSB and maybe JT65HF. They will also have 2m/440 and an Elk antenna for some possible FM satellite QSOs if the passes are at times when the moon is not up. QSL via N8PR.

[ANS thanks Ohio/Penn DX Bulletin #1210 for the above information]

NASA Cube Quest Challenge

The Cube Quest Challenge, sponsored by NASA's Space Technology Mission Directorate Centennial Challenge Program, offers a total of \$5 million to teams that meet the challenge objectives of designing, building and delivering flight-qualified, small satellites capable of advanced operations near and beyond the moon.

1) You are cordially invited to subscribe to the official, new, Cube Quest Challenge mailing list!

The Cube Quest mailing list will:

- * Broadcast official announcements regarding the Challenge
- * Enable list members to post messages, share ideas, collaborate, and

offer Challenge-related services

- * Be monitored by Cube Quest to approve list members and keep posts on-topic

To subscribe, visit:

<https://lists.nasa.gov/mailman/listinfo/cube-quest-challenge> and follow the instructions.

2) Revised Operations and Rules and other documents have recently been posted to the Cube Quest web pages.

To keep up-to-date, visit: <http://www.nasa.gov/cubequest/details/> and keep your eyes on the News and Updates announcements. (News and Updates will also be posted to the Cube Quest mailing list.)

3) Cube Quest judges Dr. David Klumpar and Bruce Yost will be attending the April 22-24 CubeSat Developers Workshop at Cal Poly, so be sure to say "hi".

4) Less than 108 days before the first Cube Quest Ground Tournament! There's still time to register your team. Download the official Operations and Rules document, then visit the [http://www.nasa.gov/cubequest/details/](http://www.nasa.gov/cubequest/details/how%20to%20enter) "how to enter" link to register your team.

[ANS thanks Jim Cockrell for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU40S
ku40s at amsat dot org